

IX. A LIST OF PRIONID BEETLES TAKEN AT KARTABO,
BARTICA DISTRICT, BRITISH GUIANA, WITH THE
DESCRIPTION OF A NEW SPECIES.

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(PLATES IV-V).

In presenting the following list of *Prioninae*, the writer does not wish to suggest that the species mentioned are all of those which may be found at Kartabo. The list only enumerates those which actually have been found there. The list has been based upon the collections of the writer made from June to October, 1925, and from July to October, 1927, and the somewhat heterogenous collection of the New York Zoölogical Society, which in no way represents an intensive survey. The specimens in the last named collection were taken at random by various members of Dr. Beebe's parties, who were mainly interested in other fields of research. The only systematic records available are those made by the writer.

While several of the species mentioned are represented during most of the year at Kartabo, there are doubtless many others present in seasons when no survey was made. The writer has experienced too many difficulties in jungle-studies to assume that he collected all of the species present during the months of his stay at Kartabo. Other forms taken elsewhere in British Guiana, and which are undoubtedly to be found at Kartabo, are not included in the list, which is strictly confined to Kartabo.

The writer is at a loss to explain the entire absence of many well known genera, which are abundant in the region of the Orinoco to the northwest and in the two Guianas to the southeast. However, it would require a long period of time to exhaust the resources of Kartabo.

Certain forms are either scarce or difficult to find. For instance, in all the years of investigation at Kartabo, only one specimen of *Macrodonia cervicornis* has been taken, and that dropped from above and landed at the writer's feet. Such a large and conspicuous form,

were it abundant, would be well represented in the general collection, because no student, regardless of his interests, could overlook such a striking form.

Like the mammals, the beetles seem to be abundant in an inverse ratio to their size. Due to the fact that many of them are not active, flying forms, their detection is largely a matter of chance. Then, too, some sap-drinking forms remain in the upper regions of the larger trees, while still others remain concealed during the hours of daylight and are chiefly about at night, so that they are not easily obtained. An attempt was made to ascertain the periods of activity of the various forms and the results of these studies made it possible to obtain abundant material in many cases.

In attempting a systematic survey, the writer collected intensively at all hours of the day and night. Light screens and every sort of trapping device were used. Carcasses of mammals, serpents, lizards, and various kinds of excrement were used for bait. Frequently, in the darkness of night, some form would noisily fly past, and by quick use of the flash and net many such forms were taken. But attempts to secure biological data as to these did not usually meet with much success. To secure such data in most cases would require long residence and incessant effort.

There is no doubt that the coleopterous fauna of Kartabo is large, and the writer is convinced that the present list represents only a small percentage of the number of *Prioninæ* to be found there; it is offered only as a contribution to our knowledge of the fauna of that one locality.

In attempting to complete the study of the *Cerambycidaæ* of the Kartabo District, the writer has exhausted every resource. Original descriptions, distributional records, and many types have been examined. The identified collection has been checked against the museum collections both in Europe and America. The absence of many species from the collections of large museums (particularly of *Lamiinæ* and *Cerambycinæ*) indicates the fertility of British Guiana for systematic work.

The difficulties encountered in making a systematic survey of a new region are apt to convert the student to some of the various theories of classification on mathematical or other bases. The examination of bulky bibliographies and failure to secure access to im-

portant but rare papers, make systematic work rather tiresome and discouraging, and emphasize the need of monographic works.

The tendency of some workers to visit a comparatively unknown region for a short time, and then to assume that all forms taken must be new, is to be frowned upon. There is a tendency toward greater conservatism in the creation of new species than was formerly the custom. The conservative student, having experienced so much discouragement in eliminating synonyms, will welcome anything that may tend to reduce his labors. The overlapping of Amazonian and Central American faunæ in British Guiana makes extreme caution necessary in listing forms from that region.

In the synonymy of the species in this paper I have closely followed that given by Lameere in the *Junk-Schenkling Coleopterorum Catalogus*, supplemented by the more extended paper which the same author has given us in the *Genera Insectorum*, fasc. 172, 1919.

The writer wishes to take this opportunity to express his appreciation of the courtesies extended by Professor Dr. Ferdinand Pax and his associates at the Zoölogisches Institut und Museum in Breslau; Mr. G. K. Arrow and his associates at the British Museum of Natural History; Professor Dr. H. Kuntzen at Berlin; Dr. Hugo Kahl, Curator of Entomology at the Carnegie Museum; and to Dr. William Beebe, whose splendid coöperation added to the pleasure of studying at Kartabo. Dr. W. J. Holland, of the Carnegie Museum, has, as heretofore, been generous in placing his private library at the writer's command, as well as in aiding me in the preparation of this paper for the press.

It would be a breach of courtesy to fail to express my appreciation of the many favors granted by the officials of the Aluminum Company of America and their South American representatives, who generously aided me in many ways.

Family CERAMBYCIDÆ.

SUBFAMILY PRIONINÆ.

Group II MACROTOMINI Lameere.

Genus STENODONTES Serville.

Stenodontes SERVILLE, Ann. Soc. Ent. France, I, 1832, p. 175.

Subgenus *Mallodon* Serville.

Mallodon SERVILLE, Ann. Soc. Ent. France, I, 1832, p. 176.

Three forms of this interesting genus have been found at Kartabo. There is some variation within each species, especially in size and color. They are active at night and are attracted to light. During the day they rest beneath loose bark, or in excavations made by their larvæ, which live in wood. The adults are never found among the foliage. The largest species, *M. spinibarbe*, is the commonest.

1. *Mallodon spinibarbe* (Linnæus). Pl. IV, fig. 1, ♂.

- Cerambyx spinibarbis* LINNÆUS, Syst. Nat., Ed. X, 1758, p. 390.
Armiger frangens (♀) VOET, Cat. Col., II, 1778, p. 2, pl. I, f. 2.
Armiger miles (♂) VOET, *l. c.*, p. 2, pl. I, f. 3.
Prionus maxillosus OLIVIER, Entomologie, IV, 1795, p. 16, pl. I, f. 3.
Prionus dentatus FABRICIUS, Syst. Eleuth., II, 1801, p. 263.
Prionus similis SCHÛNHERR, Sys. Ins., I, 3, 1817, p. 345.
Prionus geginus GERMAR, Ins. Spec. Nov., 1824, p. 468.
Mallodon germari THOMSON, Physis, I, 1867, p. 100.
Mallodon subcancellatus THOMSON, *l. c.*, p. 102.
Mallodon bonariense THOMSON, *l. c.*, p. 99.
Mallodon d'orbigny THOMSON, *l. c.*, p. 101.
Mallodon spinibarbis LAMEERE, Mém. Soc. Ent. Belg., IX, 1902, p. 75; in JUNK-SCHENKLING, Col. Catal., Pt. 52, 1913, p. 12; Gen. Insect., fasc. 172, 1919, p. 32.

This species is the largest of the genus, and by far the commonest at Kartabo. About one hundred and fifty specimens were collected by me during my two visits to that locality.

2. *Mallodon dasystemum* (Say).

- Prionus dasystemus* SAY, Journ. Acad. Sci. Phila., III, 1823, p. 326.
Mallodon melanopus HALDEMAN, Trans. Am. Phil. Soc., X, 1847, p. 31.
Mallodon spinibarbe HALDEMAN, *l. c.*
Mallodon costulatum LECONTE, Journ. Acad. Nat. Sci. Phila. (2) II, 1852, p. 111.
Mallodon dasystemum LECONTE, *l. c.*, p. 112.
Mallodon dasystemus LAMEERE, Mém. Soc. Ent. Belg., IX, 1902, p. 79; in JUNK-SCHENKLING, Col. Catal., Pt. 52, 1913, p. 12; Genera Insect., fasc. 172, 1919, p. 32.

SUBSPECIES.

- a. *Mallodon dasystemus masticator* THOMSON, Physis, Vol. I, 1867, p. 99. (Columbia to Mexico); LAMEERE, Mém. Soc. Ent. Belg., IX, 1902, p. 70; in JUNK-SCHENKLING, Col. Catal., Pt. 52, 1913, p. 12; Gen. Insect., fasc. 172, 1919, p. 32.
angustatus THOMSON, *l. c.*, p. 100; BATES, Biol. Cent.-Amer., Vol. V, 1879, p. 9, *l. c.*, 1884, p. 236.
degeneratus THOMSON, *l. c.*, 1867, p. 95.
 ? *debilis* CASEY, Mem. Col., V, 1912, p. 222.

- b. *Mallosdon dasystemus plagiatus* THOMSON, *l. c.*, p. 95; LAMEERE, Mém. Soc. Ent. Belg., IX, 1902, p. 80; in JUNK-SCHENKLING, Col. Catal., Pt. 52, 1913, p. 12; Gen. Insect., fasc. 172, 1919, p. 32.
- c. *Mallosdon dasystemus bajulus* ERICHSON, Archiv. f. Naturg., XIII, 1847, p. 138.
occipitalis THOMSON, *l. c.*, p. 92.
chevrolati THOMSON, *l. c.*, p. 94.
columbianus THOMSON, *l. c.*, p. 98.

Genus PROTORMA Waterhouse.

Protorma WATERHOUSE, Ann. & Mag. Nat. Hist. (5) V, 1880, p. 288; LAMEERE, Ann. Soc. Ent. France, LXXXIV, 1915, p. 283 (? = gen. *Strongylaspis*); in JUNK-SCHENKLING, Col. Catal., Pt. 52, p. 14; Gen. Insect., fasc. 172, 1919, p. 26.

3. *Protorma recurvatum* sp. nov. Pl. V. fig. 1, ♂.

♂. Dull, rusty brown, the head and thorax only slightly darker than the elytra; the body beneath somewhat darker; head, thorax, and elytra very finely rugose; thorax almost twice as broad as long, not very convex, very obliquely narrowed anteriorly, the posterior portions of the lateral borders strongly recurved and extending, ending in a blunt, somewhat obtuse spine on each side at the posterior angles; sides of the thorax crenulate. Posterior margin of the thorax emarginate with a small tooth on each side of the middle and a short sunken line extending forward from the middle, forming two rather distinct lobes; elytra covered with scattered, short, almost invisible hairs; as wide as the thorax at their base, but slightly narrowed posteriorly; sutural angle without spines, but fringed with hair; each elytron with four costæ, the first and second nearly parallel and extending nearer to the apex than the others; epipleural fold channelled for its entire length; legs robust, rugose, the femora and tibia quite compressed; posterior femora less rugose above; first tarsal segment as long as the second and third united; the fourth not quite as long as the other three united; abdomen shining, very feebly punctured. *Length*, 4.3 cm.

The specimen was taken in flight at the edge of a small clearing at dusk. It was carefully compared by me with the type of *Protorma scabrosa* Waterhouse, from which it is quite distinct.

Genus MACRODONTIA Serville.

Macrodontia SERVILLE, Ann. Soc. Ent. France, I, 1832, p. 139; GORY, Ann. Soc. Ent. France, VIII, 1839, p. 124; LACORDAIRE, Gen. Col., VIII, 1869, p. 78; LAMEERE, Ann. Soc. Ent. Belg., XLVIII, 1904, p. 342.

4. **Macrodonia cervicornis** (Linnæus). Pl. IV, fig. 3. ♂.

Cerambyx cervicornis LINNÆUS, Syst. Nat., Ed. X, 1758, p. 389.

Prionus cervicornis FABRICIUS, Ent. Syst., 1778, p. 161; OLIVIER, Entomologie, IV, 1795, p. 13, pl. II, fig. 8; PALISOT DE BEAUVOIS, Insect. Rec. en Afrique et Amerique, p. 215, pl. XXXIV, fig. 1.

Macrodonia cervicornis SERVILLE, Ann. Soc. Ent. France, I, 1832, p. 140; CASTELNAU, Hist. Nat., II, 1840, p. 390, pl. 25; LAMEERE, Ann. Soc. Ent. Belg., XLVIII, 1904, p. 333; in JUNK-SCHENKLING, Col. Catal., Pt. 52, 1913, p. 16; Gen. Insect., fasc. 172, 1919, p. 92.

A single specimen was taken at Kartabo, although the writer collected a number of specimens at other places in British Guiana. The species is usually found within cavities in trees during the day. At night they walk about and seldom take wing. Their flight is noisy, awkward, and of short duration.

Genus **JALYSSUS** Thomson.

Jalyssus Thomson, Syst. Ceramb., 1864, p. 296.

5. **Jalyssus tuberculatus** (Olivier). Pl. IV, fig. 2, ♀.

Prionus tuberculatus OLIVIER, Entomologie, IV, 1795-6, p. 20, pl. VI, fig. 32.

Ctenoscelis tuberculatus SERVILLE, Ann. Soc. Ent. France, I, 1832, p. 135.

Mecosarthron tuberculatus BUQUET, Ann. Soc. Ent. France, XII, 1843, p. 239.

Jalyssus tuberculatus THOMSON, Syst. Ceramb., 1864, p. 297; BATES, Trans. Ent. Lond., XVII, 1869, p. 45; LAMEERE, Mém. Soc. Ent. Belg., XI, 1903, p. 67; in JUNK-SCHENKLING Col. Catal., Pt. 52, 1913, p. 33; Gen. Insect., fasc. 172, 1919, p. 29.

This is apparently an uncommon form, only one specimen having been taken at Kartabo. It is also rare in Museum collections where it is usually listed under the genus *Pyrodes* or *Mecosarthron*.

It is distinctly different from *Mecosarthron*, however, in that the third antennal segment is longer than the fourth.

Group III **CALLIPOGONINI**.Genus **CALLIPOGON** Serville.

Callipogon Serville, Ann. Soc. Ent. France, I, 1832, p. 140.

Subgenus *Orthomegas* Serville.

Orthomegas Serville, l. c., p. 149.

6. *Orthomegas cinnamomeus* (Linnæus). Pl. IV, fig. 4, ♂.

Cerambyx cinnamomeus LINNÆUS, Syst. Nat., Ed. X, 1758, p. 389.

Prionus cinnamomeus DRURY, Ill. Ins., I, 1773, p. 89, pl. XL, fig. 2; FABRICIUS, Systema Ent., 1775, p. 183.

Prionus mucronatus FABRICIUS, Systema Ent., 1775, p. 160.

Prionus cinctus VOET, Col. Catal., II, 1778, p. 16, pl. XV, fig. 60.

Prionus corticanus OLIVIER, Encycl. Méth., V, 1790, p. 294; Entomologie, IV, 1795, p. 21, pl. IX, fig. 34; CASTELNAU, Hist. Nat., II, 1840, p. 401.

Prionus spadiceus DALMAN, in SCHÖNHERR, Syn. Ins., I, 3, Appendix, 1817, p. 148.

Orthomegas cinnamomeus SERVILLE, Ann. Soc. Ent. France, I, 1832, p. 149; BATES, Trans. Ent. Soc. Lond., XVII, 1869, p. 41; Biol. Cent.-Amer., Vol. V, 1884, p. 232; LAMEERE, Ann. Soc. Ent. Belg., XLVIII, 1904, p. 62; in JUNK-SCHENKLING, Col. Catal., Pt. 52, 1913, p. 52; Gen. Insect., fasc. 172, 1919, p. 85.

Both the larger and the smaller forms occur in abundance at Kartabo, where they are attracted in numbers to lights. Several specimens were taken during the day, as they rested on the bark of trees in the dense woods.

Group IV DERANCISTRI.

Genus PYRODES Serville.

Pyrodes SERVILLE, Ann. Soc. Ent. France, I, 1832, p. 186; LAMEERE, Mém. Soc. Ent. Belg., Vol. XVII, 1909, p. 37.

Subgenus *Esmeralda* Thomson.

Esmeralda THOMSON, Classific. Cerambyc., 1860, p. 303; LACORDAIRE, Gen. Col., VIII, 1869, p. 178; LAMEERE, Mém. Soc. Ent. Belg., XVII, 1909, p. 57; *ibidem* Vol. XXI, 1912, p. 171; Gen. Insect., fasc. 172, 1919, p. 104.

7. *Esmeralda auratus* (Linnæus). Pl. V, fig. 2, ♂; fig. 3, ♀.

Cerambyx auratus LINNÆUS, Syst. Nat., Ed. X, 1758, p. 395.

♀ *Cerambyx bifasciatus* LINNÆUS, Syst. Nat., Ed. XII, 1767, p. 624.

Prionus bifasciatus FABRICIUS, Systema Ent., 1775, p. 162; OLIVIER, Entomologie, IV, 1795, p. 32, Pl. IV, figs. 4a, b.

Prionus amazonus FABRICIUS, Syst., Eleuth., 1901, p. 202.

Cerambyx amazon VOET, Col. Cat., II, 1806, p. 9, pl. III, fig. 9.

ab. *nodicornis* (Bates).

Pyrodes nodicornis BATES, Trans. Ent. Soc. Lond., XVII, 1869, p. 53.

Esmeralda auratus LAMEERE, Mém. Soc. Ent. Belg., XVII, 1909, p. 60; Gen. Insect., fasc. 172, 1919, p. 104.

VARIETIES.

- a. *Esmeralda auratus nigricornis* GUÉRIN.
Pyrodes nigricornis GUÉRIN, Verh., Zool.-Bot. Ges., Wien, V, 1855, p. 598;
 BATES, Trans. Ent. Soc. Lond., 1869, p. 53; LAMEERE, Mém. Soc. Ent.
 Belg., Vol. XVII, 1909, p. 59; Gen. Insect., fasc. 172, 1919, p. 104.
Rubrozonatus (Lucas).
Pyrodes rubrozonatus LUCAS, Voy. Castelnau, 1859, p. 180, pl. II, fig. 2, ♂.
 var. *Candezei* (Lameere).
Pyrodes candezei LAMEERE, Ann. Soc. Ent. Belg., XXIX, 1885, Bull. p. xii,
 ♀; Gen. Insect., fasc. 172, 1919, p. 104.
- b. *Esmeralda auratus gratiosus* Bates.
Pyrodes gratiosus BATES, Trans. Ent. Soc. Lond., XVII, 1869, p. 51; LAMEERE,
 Mém. Soc. Ent. Belg., Vol. XVII, 1909, p. 59.
Esmeralda insignis NONFRIED, Ent. Nachr., XX, 1894, p. 136, ♂.

The female of this species is quite beautiful. The broad elytra are brilliantly colored with a reddish pink and have a large diamond-shaped area in the middle which is bluish green. There is also a transverse, bluish band across the apices of the elytra. The head and thorax are green, while the under side of the body as well as the legs are blue and shining. The male is much smaller than the female and is usually of a nearly uniform color which is bronze, reflecting green. The legs of the males are usually prominently marked with pink and blue.

Group V PRIONINI.

Genus DEROBRACHUS Serville.

Derobrachus SERVILLE. Ann. Soc. Ent. France, Vol. I, 1832, p. 154.

8. *Derobrachus agyleus* Buquet.

Derobrachus agyleus BUQUET, Ann. Soc. Ent. France, (2) X, 1852, p. 657; LAMEERE,
 Ann. Soc. Ent. Belg., LV, 1911, p. 268; Gen. Insect., fasc. 172, 1919, p. 124.

A single example of this species was obtained. It was brought to me by a servant who reported that he had found it on the ground at the base of a Mora tree.

EXPLANATION OF PLATE IV.

(All figures two-thirds natural size.)

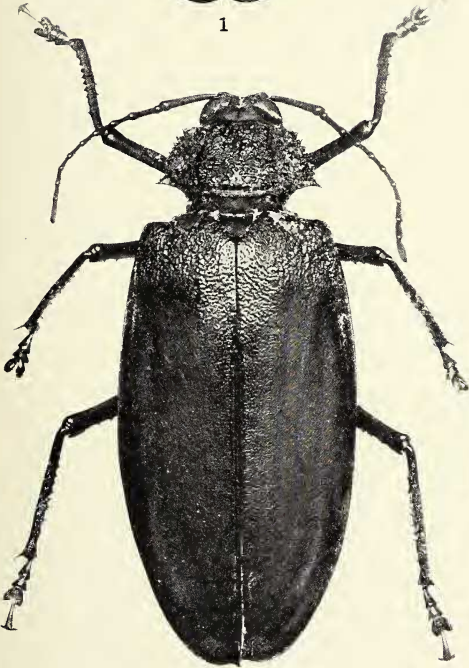
- Fig. 1. *Mallodon spinibarbe* (Linnæus) ♂.
Fig. 2. *Jalyssus tuberculatus* Thomson, ♀.
Fig. 3. *Macrodonia cervicornis* (Linnæus) ♂.
Fig. 4. *Orthomegas cinnamomeus* (Linnæus) ♂.



1



3

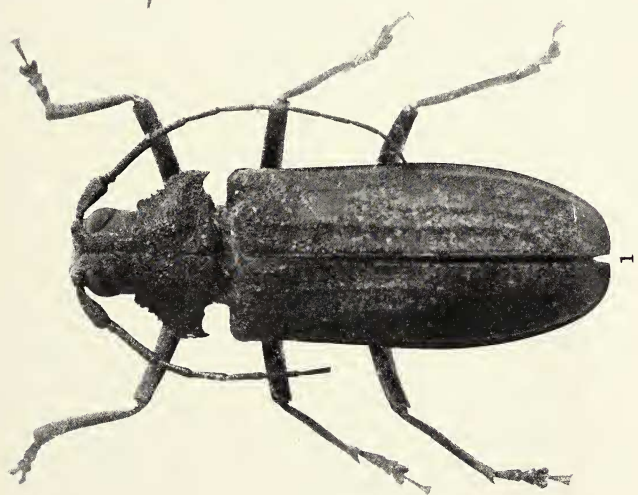


2



4

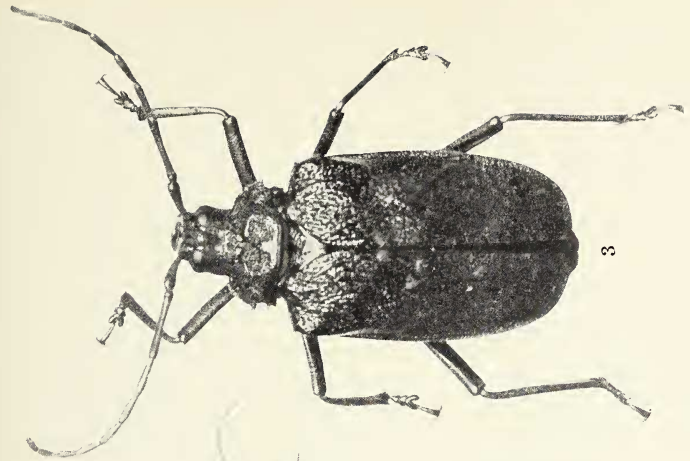
For explanation see opposite page.



1. *Protorma recurvatum* sp. nov., ♂. Type, nat. size.



2. *Esmeralda auratus* (Linnaeus) ♂, nat. size.



3. *Esmeralda auratus* (Linnaeus) ♀, nat. size.